

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/EP 03/14447

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 B01J31/22 B01J31/34 C07F17/00 C08F10/00

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 B01J C07F C08F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, CHEM ABS Data

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P, X	WO 03/024982 A (BASELL POLYOLEFINE GMBH ; MIHAN SHAHRAM (DE); NIFANT EV ILYA (RU)) 27 March 2003 (2003-03-27) examples 2,3 page 13, line 1 - page 15, line 5	1-6,8-11
X	WO 01/12641 A (SCHWEIER GUENTHER ; BASF AG (DE); ENDERS MARKUS (DE); HACK JOHANNES) 22 February 2001 (2001-02-22) page 28-41; examples 6-10 page 3, line 5 - page 4, line 31 page 8, line 34 - line 47	1-6,8-11
X	WO 01/92346 A (UNION CARBIDE CHEM PLASTIC) 6 December 2001 (2001-12-06) cited in the application claims 1-13; examples 1-8	1-6,8-11
	-/-	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

\* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*S\* document member of the same patent family

Date of the actual completion of the international search

19 April 2004

Date of mailing of the international search report

27/04/2004

Name and mailing address of the ISA

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>BLAIS M S ET AL: "PENDENT AMINOALKYL-SUBSTITUTED MONOCYCLOPENTADIENYL TITANIUM COMPOUNDS AND THEIR POLYMERIZATION BEHAVIOR" ORGANOMETALLICS, WASHINGTON, DC, US, vol. 17, 1998, pages 3775-3783, XP001021028 ISSN: 0276-7333 cited in the application the whole document -----</p>	1-13

**FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210**

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. Claims: 7,12,13; partially: 1-6,8-11

The subject-matter of claims 1-13 wherein the substituents R1B and/or R2B are not joint with the heteroaromatic ring system A to form ring.

2. Claims: partially: 1-6,8-11

The subject-matter of claims 1-6,8-11 wherein the substituents R1B and/or R2B are joint with the heteroaromatic ring system A to form a five- or six-membered ring.

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## Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☒ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

### Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP 03/14447

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
WO 03024982	A	27-03-2003	DE	10145453 A1	05-06-2003
			WO	03024982 A1	27-03-2003
WO 0112641	A	22-02-2001	US	6437161 B1	20-08-2002
			AT	232539 T	15-02-2003
			AU	6569100 A	13-03-2001
			BR	0013223 A	04-06-2002
			CN	1399640 T	26-02-2003
			DE	50001252 D1	20-03-2003
			WO	0112641 A1	22-02-2001
			EP	1212333 A1	12-06-2002
			EP	1288219 A2	05-03-2003
			ES	2192538 T3	16-10-2003
			JP	2003507387 T	25-02-2003
			US	2003055267 A1	20-03-2003
			US	2003036658 A1	20-02-2003
			US	2003036662 A1	20-02-2003
WO 0192346	A	06-12-2001	AU	5909801 A	11-12-2001
			WO	0192346 A2	06-12-2001